

CLAIMS

What is claimed is:

1. A method of inhibiting amyloid plaque formation in a cell population comprising contacting said cell population with an effective amount of a compound selected from:
 - (S) 6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-5-phenethyl-3,4-dihydro-2H-naphthalen-1-one;
 - 6-[2-(1H-Imidazol-4-yl)-ethoxy]-3,4-dihydro-2H-naphthalen-1-one;
 - E-(+/-)-6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-2-thiophen-2-ylmethylene-3,4-dihydro-2H-naphthalen-1-one;
 - 6-[1-(4-Chloro-phenyl)-2-imidazol-1-yl-ethoxy]-3,4-dihydro-2H-naphthalen-1-one racemic;
 - (R) 6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-3,4-dihydro-2H-naphthalen-1-one;
 - 6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-4-phenyl-3,4-dihydro-2H-naphthalen-1-one racemic;
 - 6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-5-isopropoxymethyl-3,4-dihydro-2H-naphthalen-1-one;
 - (S) 6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-5-phenylaminomethyl-3,4-dihydro-2H-naphthalen-1-one;
 - (S) 6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-5-[2-(4-fluorophenyl)ethyl]-3,4-dihydro-2H-naphthalen-1-one;
 - (S) 5-Benzenesulfonylmethyl-6-(2-imidazol-1-yl-1-phenyl-ethoxy)-3,4-dihydro-2H-naphthalen-1-one;
 - (S) 6-(2-Imidazol-1-yl-1-phenyl-ethylsulfanyl)-5-phenethyl-3,4-dihydro-2H-naphthalen-1-one;
 - (S) 6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-5-(2-pyridin-2-yl-ethyl)-3,4-dihydro-2H-naphthalen-1-one;
 - 6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-5-(2-pyridin-4-yl-ethyl)-3,4-dihydro-2H-naphthalen-1-one;

4-(5-Oxo-1-phenethyl-5,6,7,8-tetrahydro-naphthalen-2-yloxy)-4-phenyl-butyric acid;

6-[2-(3-Benzyl-3H-imidazol-4-yl)-ethoxy]-5-phenethyl-3,4-dihydro-2H-naphthalen-1-one; trifluoro-acetate;

5 (S) [1-((4-Benzoyloxy-benzyl)-[(2-methyl-2-phenyl-propylcarbamoyl)-methyl]-carbamoyl)-2-(3H-imidazol-4-yl)-ethyl]-carbamamic acid benzyl ester;

(S) [2-(1H-Imidazol-4-yl)-1-((4-methyl-benzyl)-{[(1-phenyl-cyclobutylmethyl)-carbamoyl]-methyl}-carbamoyl)-ethyl]-carbamamic acid benzyl ester;

10 1-Methyl-4-(3-chlorophenyl)-6-[(4-chlorophenyl)-(1-methylimidazol-5-yl)aminomethyl]-2,3-dihydroquinolin-2-one; and

(S) [1-((4-Benzoyloxy-benzyl)-[(2-benzoyloxy-ethylcarbamoyl)-methyl]-carbamoyl)-2-(1H-imidazol-4-yl)ethyl]-carbamamic acid benzyl ester.

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2. The method of Claim 1, wherein the compound administered is
(S) 6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-5-phenethyl-3,4-dihydro-2H-naphthalen-1-one.
3. The method of Claim 1, wherein said cell is in culture.
- 20 4. The method of Claim 1, wherein said cell population is in an animal.
5. The method of Claim 1, wherein said cell is a brain cell, a pancreatic cell, a kidney cell, a cardiac cell, a neuronal cell, or a thyroid cell.
6. A method for inhibiting amyloidosis in a patient comprising administering to said patient an amount effective to inhibit plaque formation of a
25 compound selected from
(S) 6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-5-phenethyl-3,4-dihydro-2H-naphthalen-1-one;

6-[2-(1H-Imidazol-4-yl)-ethoxy]-3,4-dihydro-2H-naphthalen-1-one;

E-(+/-)6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-2-thiophen-2-ylmethylene-3,4-dihydro-2H-naphthalen-1-one;

5 6-[1-(4-Chloro-phenyl)-2-imidazol-1-yl-ethoxy]-3,4-dihydro-2H-naphthalen-1-one racemic;

(R) 6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-3,4-dihydro-2H-naphthalen-1-one;

10 6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-4-phenyl-3,4-dihydro-2H-naphthalen-1-one racemic;

6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-5-isopropoxymethyl-3,4-dihydro-2H-naphthalen-1-one;

(S) 6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-5-phenylaminomethyl-3,4-dihydro-2H-naphthalen-1-one;

15 (S) 6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-5-[2-(4-fluorophenyl)ethyl]-3,4-dihydro-2H-naphthalen-1-one;

(S) 5-Benzenesulfonylmethyl-6-(2-imidazol-1-yl-1-phenyl-ethoxy)-3,4-dihydro-2H-naphthalen-1-one;

20 (S) 6-(2-Imidazol-1-yl-1-phenyl-ethylsulfanyl)-5-phenethyl-3,4-dihydro-2H-naphthalen-1-one;

(S) 6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-5-(2-pyridin-2-yl-ethyl)-3,4-dihydro-2H-naphthalen-1-one;

6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-5-(2-pyridin-4-yl-ethyl)-3,4-dihydro-2H-naphthalen-1-one;

25 4-(5-Oxo-1-phenethyl-5,6,7,8-tetrahydro-naphthalen-2-yloxy)-4-phenyl-butyric acid;

6-[2-(3-Benzyl-3H-imidazol-4-yl)-ethoxy]-5-phenethyl-3,4-dihydro-2H-naphthalen-1-one; trifluoro-acetate;

30 (S) [1-((4-Benzoyloxy-benzyl)-[(2-methyl-2-phenyl-propylcarbamoyl)-methyl]-carbamoyl)-2-(3H-imidazol-4-yl)-ethyl]-carbamic acid benzyl ester;

(S) [2-(1H-imidazol-4-yl)-1-((4-methyl-benzyl)-{(1-phenyl-cyclobutylmethyl)-carbamoyl]-methyl}-carbamoyl)-ethyl]-carbamic acid benzyl ester;

5 1-Methyl-4-(3-chlorophenyl)-6-[(4-chlorophenyl)-(1-methylimidazol-5-yl)aminomethyl]-2,3-dihydroquinolin-2-one; and

(S) [1-{(4-Benzyloxy-benzyl)-[(2-benzyloxy-ethylcarbamoyl)-methyl]-carbamoyl}-2-(1H-imidazol-4-yl)ethyl]-carbamic acid benzyl ester.

10 7. The method of Claim 6, wherein said amyloidosis is associated with Alzheimer's disease.

8. A method of treating Alzheimer's disease comprising administering to a patient in need of treatment an effective amount of

(S) 6-(2-Imidazol-1-yl-1-phenyl-ethoxy)-5-phenethyl-3,4-dihydro-2H-naphthalen-1-one.